ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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In the Matter of	)	
	)	
Amendment of Section 73.202(b)	)	MM Docket No. 97-196
Table of Allotments	)	RM-9151
FM Broadcast Stations	)	
	)	
(La Fayette, Georgia)	)	
	)	
	)	

To: Chief, Allocations Branch
Policy and Rules Division
Mass Media Bureau

REPLY COMMENTS

Tennessee Instructional Radio ("TIR"), by its counsel and pursuant to Section 1.420 of the Commission's Rules, hereby submits its Reply Comments in the above-captioned rule making proceeding.[1] Two parties, TIR and Radix Broadcasting, Inc. ("Radix"), the sole applicant for Channel 298A, filed comments in support of the proposed deletion of Channel 298A at La Fayette, Georgia. Only one party, Great South Broadcasting, Inc. ("GSB") opposed the request to delete the channel. For the reasons stated below, the Commission should adopt the proposal advanced in the Notice of Proposed Rule Making ("NPRM") and delete Channel 298A at La Fayette, Georgia.

1. The Commission allotted Channel 298A to La Fayette effective February 3, 1992, and established March 4, 1992, as the filing deadline. Only one party, Radix, filed a timely application for the channel. Five and a half years later that application remains pending and the

[1] Reply comments are due November 12, 1997. Thus, these Reply Comments are timely filed.

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facility is unbuilt. TIR began this proceeding with a Petition for Rule Making ("Petition") filed on April 22, 1997. TIR requested that the Commission amend the Table of Allotments to delete Channel 298A at La Fayette, Georgia, because the Federal Aviation Administration ("FAA") would not approve construction of the facility due to expected electromagnetic interference ("EMI") to air navigation. TIR filed a Supplement to Petition for Rule Making ("Supplement") on August 11, 1997, in further support of its request.

2. TIR demonstrated in the Petition and Supplement that Channel 298A is a defective allotment because operation of that channel within the available site area would cause harmful EMI to air navigation. TIR's position is supported by the following facts. First, the FAA has twice refused to issue a Determination of No Hazard to Radix solely based upon EMI. Second, TIR's consulting engineer conducted a study of seven sites -- Radix's proposed site, the reference coordinates for the allotment and five other hypothetical sites -- within the available site area. He concluded that even assuming operation of Channel 298A at the minimum permissible Class A effective radiated power of 0.1 kilowatts, there would be interference to FAA navigational devices from each of those sites. See Supplement, Engineering Exhibit at p. 3.

3. In response to the Petition and Supplement, the Commission released an NPRM on September 5, 1997, requesting public comment on TIR's proposal to delete Channel 298A at La Fayette. The Commission established October 27, 1997, as the date by which comments on the proposed deletion should be filed. TIR filed supporting comments. Based upon its experience with the FAA, Radix also filed comments supporting the proposed deletion. While acknowledging that deletion of the channel would result in dismissal of its pending application, Radix expressed its understanding that such dismissal would occur only if the Commission first acted to delete the channel.

4. Only one party, GSB, filed comments opposing the deletion of Channel 298A at La Fayette. GSB began its comments by reciting the engineering analysis submitted by TIR in its Supplement. That analysis contained a map illustrating the area in which Channel 298A would be properly spaced under Section 73.207 of the Commission's Rules. The seven sites described in paragraph 3 above are representative of the entire site area as they are located both within and on the edges of that area. Assuming operation of Channel 298A at 0.1 kilowatts effective radiated power, the minimum power permitted by Section 73.211(a) of the Commission's Rules, the FAA's Airspace Analysis Model ("FAA Model") predicted interference at each site.

5. GSB does not challenge or rebut TIR's detailed analysis which documents interference to air navigation at 0.1 kilowatts. Rather, in a few conclusory sentences GSB offers several unsupported solutions which it claims would cure the interference to air navigation facilities caused by Channel 298A at La Fayette. Unlike GSB, which presents no credible evidence of any examination of its claimed solutions, TIR analyzed the purported solutions using the FAA Model and determined that none of them will resolve the interference problem. The Commission should thus reject GSB's comments and delete Channel 298A.

6. In order to examine the solutions suggested by GSB, TIR retained John P. Allen, whose qualifications as an air space consultant are well known to the Commission. Mr. Allen studied each of the three proposals. See Exhibit 1, Affidavit of John P. Allen.[2] To establish a baseline for comparison, Mr. Allen first conducted an analysis of the site proposed by Radix in its application, using the FAA's Model. He assumed operation

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[2] TRI's consulting engineer, John J. Mullaney, agrees with the analysis of Mr. Allen. See Exhibit 2, Declaration of John J. Mullaney.

from that site using a 6-bay antenna at the maximum power of 6 kilowatts for a Class A station. He determined that there would be interference to operations at the Chattanooga/Lovell Field. Because the FAA's policy is one of zero tolerance of interference to air navigation, Mr. Allen's analysis confirms the basis for the FAA's refusal to authorize the proposed operation.

7. Having established a baseline for comparison, Mr. Allen then considered GSB's first proposal. In its Comments, GSB suggested employing the use of a halfwave spaced antenna. The Technical Statement filed in support of GSB's Comments offered nothing more than a perfunctory conclusion that this type of antenna could reduce radiation from an FM station. GSB did not provide any type of study to show the effects of using such an antenna. Had such a study been conducted, GSB would have determined that a halfwave spaced antenna would not solve the interference problem. Mr. Allen again conducted an analysis of Radix's proposed site and assumed operation at the maximum power of 6 kilowatts using a 14-bay halfwave spaced antenna with one degree of beam tilt.[3] He again determined that there would be interference to operations at the Chattanooga/Lovell Field. In fact, the interference was reduced only minimally using the larger bay antenna. Mr. Allen went further and conducted an analysis using a 14-bay halfwave spaced antenna with one degree of beam tilt operating at 0.1 kilowatts, the minimum power permitted under the Commission's Rules. Even at this minimum power level, the FAA's Model detected interference. Mr. Allen then conducted the same study at each of the hypothetical sites identified by TIR in its Supplement and determined that the interference was not confined to the site proposed by Radix. Interference to air navigation would result from

[3] A 14-bay antenna is the largest antenna pattern permitted by the FAA when conducting an interference analysis. See Exhibit 1, at p. 3.

operation at each and every site using a 6-bay or 14-bay halfwave spaced antenna at both the maximum (6 kw) and the minimum (0.1 kw) power for a Class A station.

8. As the Commission is aware, the FAA's policy is one of zero tolerance of interference to air navigation. Mr. Allen's analysis demonstrates that operation from any of the sites within the available area would result in interference in violation of the FAA's policy even at the minimum power permitted by the Commission's Rules. TIR understands that the FAA supports this analysis.

9. The Commission recently acknowledged that a particular allotment should not be maintained where "a minimum power 100-watt facility....would also cause EMI to specific FAA localizers...." Report & Order (Mt. Juliet and Belle Meade, Tennessee), DA 97-1559, released July 25, 1997, at ¶ 5, aff'd Memorandum Opinion and Order, DA 97-2297, released October 31, 1997. The Commission's policy is to accommodate FAA concerns when considering the viability of a particular channel. In Report & Order (Sebring and Miami, Florida), 10 FCC Rcd 6577 (MMB 1995), the Commission refused to allot a Class A channel because there were "no satisfactory sites available that would meet FAA criteria and the Commission's spacing requirement." R&O, at ¶6. In that case the Commission concluded that the only potential site was within 10,000 feet of an airport terminal and FAA approval for such a transmitter site would not be granted. See also, Report & Order (Wilmington, North Carolina et. al.), 6 FCC Rcd 6969 (MMB 1991)(Commission declined to allot a television channel because it would require an antenna tower with a height potentially unacceptable to the FAA); Report & Order (Weaverville, California), 12 FCC Rcd 2965 (MMB 1997)(Commission declined to add a particular Class A

channel because of technical limitations imposed by the proximity of the available site area to a local airport and the corresponding height that would be required to comply with the Commission's Rules).

10. GSB's proposal to use a directional antenna was similarly supported by nothing more than a claim in the Technical Statement that such antennas "are used to reduce RF potential". GSB made no attempt to demonstrate that such an antenna would resolve the interference problem for operation on Channel 298A. Again, Mr. Allen's analysis using the FAA's Model shows that operation at 0.1 kilowatt, the minimum permitted by the Commission's Rules, would cause interference. As explained by Mr. Mullaney, commercial FM allotments are made on the basis of maximum facilities. See Exhibit 2, at p. 4. The fact that Channel 298A can not even operate at minimum facilities makes it a substandard allotment.[4]

11. The Commission views its standards at the allotment stage to be the "foundation" which "protect[s] the integrity of FM station licenses." Letter re Station KFTE(FM), Breaux Bridge, LA, dated October 10, 1996.[5] As described by Mr. Mullaney, those standards are simple and straightforward. See Exhibit 2, at p. 5. A request to allot a channel must propose operation from a particular site which complies with minimum distance separation and city-grade coverage using maximum facilities. The site proposed must further be one that is not in an area that "would necessarily present a hazard to air navigation." Report & Order, 8 FCC Rcd 4735 (1993), at n. 19. Thus, the allotment of Channel 298A at La Fayette was defective from the start due to the absence of a suitable site from which maximum facilities can be proposed and not

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[4] Given that Channel 298A at La Fayette must operate at less than maximum facilities, GSB's claim that the channel would serve over 100,000 persons within the 1 mV/m contour is incorrect. That claim assumes operation at maximum power and height for a Class A facility.

[5] A copy of the letter is attached as Exhibit 3.

cause a hazard to air navigation. Had the Commission known at the time Channel 298A at La Fayette was first proposed that the EMI conditions within the allowable site area were so severe, TIR believes that the Commission would have rejected the proposed allotment.

12. GSB's final suggestion, which GSB's own technical consultant calls "radical", is to change the frequencies at the airports affected. Once again, GSB makes an assertion without support. GSB blithely assumes that frequencies are available for substitution despite the interrelationship of currently assigned frequencies to other airports and the FM Table of Allotments. Such an assumption is comparable to a proponent in a rule making proceeding making the assertion that a channel can be allotted to a particular city without establishing that it complies with the Commission's Rules. The Commission requires that a proponent be specific about what cities and channels are involved. See Exhibit 2, at p. 4. The Commission should expect nothing less from a proponent of a change in aeronautical frequencies. Mr. Allen states that any changes to frequencies must be agreed to by both the FAA and the operators of the airports affected. Based upon his wealth of experience Mr. Allen concludes that such a complex process "should not be relied upon as a viable option". See Exhibit 1, at p. 3.

13. The analysis undertaken by TIR reinforces what Radix learned in pursuing a construction permit for Channel 298A. Based upon his analysis, Mr. Allen's expert opinion is that the FAA will not approve the construction of this facility due to the air hazard that it would pose. See Exhibit 1, at p. 4. Such a facility can not operate with maximum facilities, a requirement at the allotment stage, and it can not operate with even the minimum facilities required by the rules without causing interference. Channel 298A at La Fayette should be

deleted as inconsistent with the Commission's policy that spectrum be used efficiently.[6] The deletion will make valuable spectrum available for other uses.[7]

14. Once the Commission reaches the proper conclusion that Channel 298A should be deleted, then the expression of interest advanced by GSB must be rejected.[8] In the unlikely event that the Commission does not delete Channel 298A at La Fayette, then Radix's application, which is protected from competing applications pursuant to Section 73.3564(d) of the Rules, must first be acted upon. Only if the Commission reviews the Radix application and determines that it should be dismissed would the Commission then be able to consider accepting another application for that channel.

15. To summarize, TIR's detailed analysis refutes the unsupported suggestions offered by GSB and shows that Channel 298A is a defective allotment that does not satisfy the

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[6] The deletion of Channel 298A will not result in a loss of service, as there is no facility presently operating on that channel. The Commission has been willing to delete a channel from a community where there is an unbuilt construction permit finding that the permit is "not a service on which the public has come to rely". Report and Order (Pawley's Island and Atlantic Beach, South Carolina), 8 FCC Rcd 8657 (1993). Surely then, deletion of a channel for which a construction permit has not even been issued is consistent with such a finding. Moreover, the residents of La Fayette will continue to enjoy first local transmission service from Station WQCH(AM), a station owned and operated by Radix.

[7] TIR is aware of an opportunity that could be made available should Channel 298A at La Fayette be deleted. Channel 298A at Roswell, Georgia, could be upgraded to a Class C3 facility and thereby increase the population served by 33% from 1,681,000 to 2,235,000. The permittee of that station, Dogwood Communications, Inc., is a 100% minority-owned and controlled company which fought for almost 10 years in a comparative hearing to obtain the construction permit. The defective allotment at La Fayette was made during that period and would now limit the ability of the station at Roswell to improve its facility.

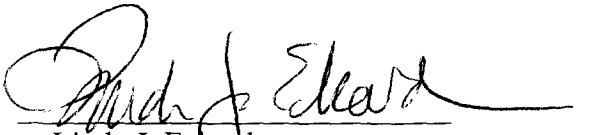
[8] The Commission has ample precedent for determining that when an allotment is defective, an expression of interest, even if in the form of a pending application, does not justify retention of the channel. See Report and Order (East Hemet, California, et. al.), 4 FCC Rcd 7895 (MMB 1989); Report and Order (Harrisonburg, Virginia, et. al.), 6 FCC 2d 793 (1967); FM Channel Assignment at Pinckneyville, IL, 41 RR 2d 69 (B/cast Bur. 1977); and Report and Order (San Clemente, California), 10 FCC Rcd 8291 (MMB 1995).

minimum requirements of the Commission's Rules. To maintain such an inferior allotment would undermine the integrity of the Commission's allotment scheme.

WHEREFORE, Tennessee Instructional Radio requests that the Commission AMEND Section 73.202(b) to DELETE Channel 298A at La Fayette, Georgia, from the Table of FM Allotments.

Respectfully submitted,

TENNESSEE INSTRUCTIONAL RADIO

By: 

Linda J. Eckard
Pamela C. Cooper

Davis Wright Tremaine LLP
1155 Connecticut Ave.
Suite 700
Washington, D.C. 20036

Its Counsel

November 12, 1997

Exhibit 1*

* Please note that the Affidavit executed by John P. Allen is a photocopy. The original will be submitted at a later date as a supplement.

John P. Allen
Airspace Consultant

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(904) 261-6523
FAX (904) 277-3651

P.O. Box 1008
Fernandina Beach, FL 32035-1008

STATE OF FLORIDA)

)

COUNTY OF NASSAU)

AFFIDAVIT OF JOHN P. ALLEN

I, John P. Allen, being first duly sworn, do hereby depose and state that I am an Airspace Consultant in private practice, with offices at 905 South 8th Street, Fernandina Beach, Florida. My qualifications are a matter of record with the Federal Aviation Administration (FAA) and the Federal Communications Commission (FCC). A brief resume is attached hereto as "Attachment A."

I have been retained by Tennessee Instructional Radio ("TIR"), to conduct an independent aeronautical evaluation of a proposal to amend the Commission's FM Table of Allotments to delete Channel 298A at La Fayette, Georgia. Specifically, I was requested to evaluate comments submitted by Great South Broadcasting, Inc. ("GSB") opposing the deletion of Channel 298A.

GSB through its consultant (EME Communications) has offered three specific alternatives, that it claims could be used to

eliminate the potential electromagnetic interference, detected by the FAA's Airspace Analysis Model ("Model"). GSB makes reference to the use of halfwave spaced antennas, the use of directional antenna patterns and the possibility of changing the FAA assigned frequencies to the navigational facilities with potential intermodulation products. GSB failed to support its claims with any underlying data or analysis and as shown below, none of the three alternatives are viable.

In an effort to evaluate the proposal put forth by GSB, I established a baseline of potential interference. I used the FAA's Airspace Analysis Model, Version 4.21, as supplied by the FAA's Spectrum Engineering Branch (ASM-500). The FM data used in the analysis was current as of September, 1997 and a standard wave generic antenna pattern (six bay) was used in the initial analysis. The FAA's Model detected potential interference to the CGW localizer facility serving Runway 2 at the Chattanooga/Lovell Field. Using the site identified in the application of Radix Broadcasting, Inc. at Coordinates: Latitude 34-41-38 North - Longitude 85-16-12 West (North American Datum - 1927), the Model detected 2,102, 2, and 160 points of interference at 6 KW. See Attachment "B". Remaining at 6 KW and incorporating a fourteen bay halfwave spaced antenna with one degree of beam tilt, the potential interference points were reduced, though not

significantly from 2,102, 2, and 160 points to 2,066, 1, and 154 points of interference. Since the FAA's policy towards new FM stations is zero points of interference, even incorporation of the largest antenna pattern within the Model does not solve the problem. This analysis was again conducted with a fourteen bay halfwave spaced antenna with one degree of beam tilt with a reduction of the ERP from 6 KW to 100 watts. The Model detected 8 points of interference.

The same analysis using the FAA's Model was conducted at the five hypothetical sites that were identified in TIR's Supplement to Petition for Rule Making filed by TIR were also analyzed by the Model. In each case the results were the same. All of the sites demonstrated potential intermodulation interference to the CGW localizer facility serving Runway 2 at Chattanooga/Lovell Field See Attachment "C".

GSB has also suggested changing the navigational frequencies that would be affected, if the proposed station was authorized. In order to change frequencies, alternate frequencies must be available and the FAA and airport operators must be willing to agree to the change. Based upon my years of experience, such a process is expensive ($50,000 to $100,000 per frequency change), complex and should not be relied upon as a viable option.

In conclusion, it is my professional opinion, that the proposed Channel 298A Fayette with an operating ERP of 2.75 KW would not be acceptable to the FAA and would continue to receive a Determination of Hazard to Air Navigation by the FAA. The solutions offered by GSB would not resolve the potential intermodulation findings and would still warrant a Determination of Hazard to Air Navigation for any ERP above 35 watts.

Respectfully submitted,

John P. Allen

Subscribed and sworn to before me, the undersigned Notary Public, this 12TH day of November, 1997, by the within-named John P. Allen, well known to me to be the person executing this document.

Notary Public

My Commission Expires:

Mary C. Lowe
MY COMMISSION # CC498989 EXPIRES
October 23, 1999
BONDED THRU TROY FAIN INSURANCE, INC.

ATTACHMENT "A"

ABOUT JOHN P. ALLEN

PROFESSIONAL EXPERIENCE:

Airspace Consultant 1981-Present: Conducts aeronautical evaluations for proposed construction or alteration of structures; files appropriate forms with the Federal Aviation Administration; amends aeronautical surfaces when required; conducts negotiations and provides testimony on behalf of sponsors with FAA, FCC or local governmental bodies concerning technical matters relating to Aviation Safety.

FAA Air Traffic Controller 1968 to 1981

U. S. Air Force Air Traffic Controller 1964 to 1968

PROFESSIONAL ACTIVITIES:

Representative to the National Transportation Safety Board as an expert in air traffic control 1975 to 1977

Chairman of the Facility Air Traffic Technical Advisory Committee 1975 to 1977

Representative to the National Aviation Safety Council 1977 to 1981

Member of the Society of Broadcast Engineers

Member of the Fernandina Beach Airport Advisory Commission

Associate Membership:

Association of Federal Communication Consulting Engineers

National Association of Broadcasters

EDUCATION:

Bachelor of Science Degree. Management/Small Business Administration 1977, Jones College, Jacksonville, Florida

Professional Certifications: Air Traffic Controller

ATTACHMENT "B"

FILE: E:\AAB\DATA\RFI.PRT CASE: RT PRINT DATE: 11-03-1997 14:03:51

Airspace case #: 97-JPA-103097 Site: INITIAL TEST GENERIC
Date: 103197
AAM Version 4.21, 051094
Navaid Identifier: CGW
Navaid Frequency (MHz): 108.30

Navaid Latitude: 35. 2 39
Navaid Longitude: 85. 11 59

Runway Heading (True): 20.0
Runway Elevation (Ft. MSL): 666.
Runway Length (Ft): 7401.

Prop Stat	ID	Call	Freq (MHz)	Latitude	Longitude	ERP (Kw)	Height (MSL)	Range (NM)	Radial (True)	Lic Stat
	1	WUTC	88.10	35. 12 26	85. 16 52	30.000	2208.	10.57	157.79	L
	2	NEW-	88.50	35. 12 34	85. 16 39	.010	2648.	10.63	158.95	A
	3	WMBW	88.90	34. 57 43	85. 22 40	98.000	2493.	10.05	60.59	L
	4	WDYN	89.70	35. 10 17	85. 18 58	100.000	2149.	9.53	143.19	L
	5	WSMC	90.50	35. 15 20	85. 13 34	100.000	2313.	12.75	174.17	L
	6	W216	91.10	34. 46 28	84. 40 8	.010	2943.	30.73	301.78	C
	7	NEW-	91.30	35. 8 58	85. 1 22	.010	1591.	10.74	233.97	A
	8	W217	91.30	35. 12 5	84. 53 0	.013	1191.	18.17	238.72	L
	9	WAWL	91.50	34. 56 37	85. 18 1	6.000	1211.	7.80	39.32	L
	10	WDEF	92.30	35. 8 6	85. 19 25	97.000	2438.	8.17	131.86	L
	11	WBIN	93.10	35. 11 15	84. 38 13	6.000	935.	28.93	252.71	L
	12	W227	93.30	35. 1 21	85. 15 42	.075	1089.	3.31	66.87	L
	13	WMPZ	93.70	34. 53 46	85. 10 18	4.900	1138.	8.99	351.17	A
	14	WMPZ	93.70	34. 53 51	85. 10 25	3.000	1165.	8.89	351.70	L
	15	WJTT	94.30	35. 7 32	85. 17 23	3.000	1440.	6.59	137.86	L
	16	WJTT	94.30	35. 7 32	85. 17 23	3.300	1440.	6.59	137.86	A
	17	WJTT	94.30	35. 7 33	85. 17 25	4.700	1509.	6.62	137.78	A
	18	W234	94.70	34. 45 6	84. 42 54	.010	2838.	29.61	306.34	L
	19	NEW-	94.90	34. 46 44	85. 26 23	.010	2323.	19.82	36.57	A
	20	W236	95.10	34. 43 57	85. 1 8	.010	1877.	20.71	334.55	A
	21	WALV	95.30	35. 9 54	84. 51 13	3.500	1280.	18.47	246.89	L
	22	W238	95.50	34. 57 26	85. 17 33	.010	1299.	6.93	41.16	L
	23	WATG	95.70	34. 28 10	85. 17 48	1.300	1480.	34.81	7.89	L
	24	WAYB	95.70	35. 24 26	85. 4 18	3.000	1096.	22.67	196.07	L
	25	WDOD	96.50	35. 9 39	85. 19 11	100.000	2346.	9.15	139.92	L
	26	WKXJ	97.30	34. 57 26	85. 17 33	1.000	1352.	6.93	41.16	L
	27	WKXJ	97.30	34. 58 21	85. 37 58	16.000	1831.	21.71	78.58	L
	28	W249	97.70	35. 9 28	85. 18 36	.027	2064.	8.70	141.55	L
	29	WZST	98.10	35. 5 16	85. 21 47	1.000	1939.	8.44	108.07	L
	30	WQMT	98.90	34. 44 29	84. 43 9	1.300	1880.	29.82	307.53	C
	31	WQMT	98.90	34. 45 29	84. 43 59	3.000	1411.	28.67	306.78	L
	32	W257	99.30	35. 0 33	85. 20 39	.250	2182.	7.40	73.52	L
	33	W259	99.70	34. 43 57	85. 1 8	.010	1877.	20.71	334.55	C
	34	W260	99.90	34. 55 35	85. 5 45	.010	1358.	8.72	324.15	L

	35	WUSY	100.70	35. 12 26	85. 17 10	100.000	2507.	10.66	156.57	L
	36	W268	101.50	35. 12 30	85. 16 51	.008	2139.	10.62	158.00	L
	37	WMXN	101.70	34. 49 41	85. 45 54	1.800	1660.	30.68	65.00	L
	38	WSGC	101.90	34. 58 11	85. 5 10	1.300	1539.	7.15	308.66	L
	39	WGOW	102.30	35. 11 45	85. 13 45	6.000	1421.	9.21	170.98	L
	40	WBDX	102.70	34. 51 48	85. 23 35	.320	2474.	14.43	41.23	L
	41	W278	103.50	35. 9 28	85. 18 36	.250	2116.	8.70	141.55	L
	42	WCLE	104.10	35. 15 59	84. 50 23	2.300	1329.	22.13	232.95	L
	43	WYYU	104.50	34. 49 42	84. 53 41	3.000	1115.	19.82	310.80	L
	44	WYYU	104.50	34. 49 42	84. 53 41	6.000	1122.	19.82	310.80	C
	45	W284	104.70	34. 28 10	85. 17 48	.010	1470.	34.81	7.89	C
	46	W284	104.70	34. 57 26	85. 17 33	.010	1401.	6.93	41.16	L
	47	WSGM	104.70	35. 16 44	85. 44 2	1.000	2221.	29.75	118.26	L
	48	WDNT	104.90	35. 29 31	85. 2 59	.420	1942.	27.85	195.30	L
	49	WLMX	105.50	34. 57 26	85. 17 33	1.550	1532.	6.93	41.16	L
	50	WLMX	105.50	35. 2 55	85. 15 10	.540	1119.	2.62	95.84	L
	51	WSKZ	106.50	35. 9 42	85. 19 6	100.000	2365.	9.14	140.45	L
*	52	PROP	107.50	34. 41 38	85. 16 12	6.000	1276.	21.30	9.35	A
	53	WOGT	107.90	35. 9 42	85. 19 6	2.850	2234.	9.14	140.45	L
	54	VGQO	115.80	34. 57 40	85. 9 12	.150	705.	5.48	335.42	V

Interference thresholds are computed using the following:

Type of navaid antenna: 8 Element Traveling Wave 14 dB Gain
Type of service volume: U. S. Standard

Listing of A2/B2 Evaluations

Freq (MHz)	ID	Call	Offset (MHz)	#Pts

No A2/B2 points found.

Listing of 2-signal intermodulation (B1) combinations

Freq 1 (MHz)	ID	Call	Freq 2 (MHz)	ID	Call	IMod (MHz)	Offset (KHz)	#Pts
107.90	(53)	WOGT	107.50	(52)	PROP	108.30	0	2102

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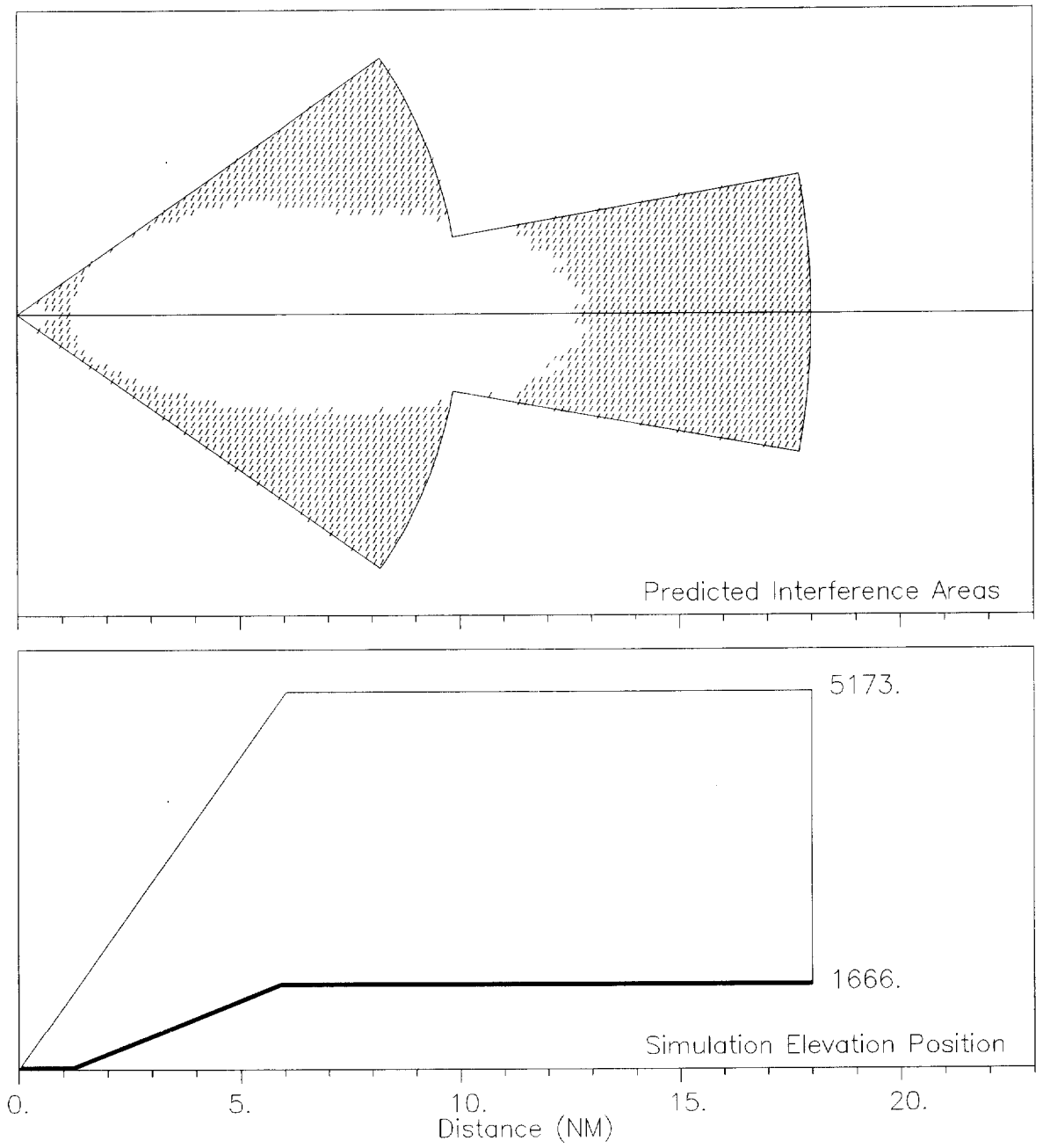
Listing of 3-signal intermodulation (B1) combinations

Freq 1 (MHz)	ID	Call	Freq 2 (MHz)	ID	Call	Freq 3 (MHz)	ID	Call	IMod (MHz)	Offset (KHz)	#Pts
107.50	52	PROP	105.50	49	WLMX	104.70	47	WSGM	108.30	0	2
107.50	52	PROP	105.50	49	WLMX	104.70	46	W284	108.30	0	160



Airspace case #: 97-JPA-103097 Site: INITIAL TEST GENERIC
Date: 103197 Plot filename: 1H_1G___.plt
Intermodulation (B1) plot: WOGT (53) & PROP (52)
Frequencies: WOGT = 107.90 MHz PROP = 107.50 MHz
Navaid: CGW Frequency: 108.30 MHz Elevation (ft MSL): 666.
Runway heading: 20.0
Grid orientation: Bottom of service volume

ATTACHMENT "C"

POTENTIAL EMI LAYFATTE GA

ORIGINAL

SITE	VAC SITE	APP SITE	SITE #1	SITE #2	SITE #3	SITE #4	SITE #5
LATITUDE	34-42-31	34-41-38	34-47-00	34-47-49	34-50-18	34-48-20	34-45-17
LONGITUDE	85-13-33	85-16-12	85-21-42	85-10-55	85-03-36	85-00-49	85-06-40
ANTENNA	GENERIC	GENERIC	GENERIC	GENERIC	GENERIC	GENERIC	GENERIC
ERP	6 KW	6 KW	6 KW	6 KW	6 KW	6 KW	6 KW
CENTER OF RADIATION	1291 ' AMSL	1264 ' AMSL	1439 ' AMSL	1230 ' AMSL	1228 ' AMSL	1215 ' AMSL	1307 ' AMSL
BRUTE FORCE (BF)		INTERMODULATION (IM)					
CGW	BF 0	BF 0	BF 246	BF 0	BF 0	BF 0	BF 0
LOCALIZER	IM 2170	IM 2102	IM 2468	IM 2562	IM 2148	IM 1836	IM 2132
	IM 3	IM 2	IM 5	IM 34	IM 9	IM 147	IM 3
	IM 162	IM 160	IM 243	IM 219	IM 177		IM 162

REDUCED ERP

SITE	VAC SITE	APP SITE	SITE #1	SITE #2	SITE #3	SITE #4	SITE #5
LATITUDE	34-42-31	34-41-38	34-47-00	34-47-49	34-50-18	34-48-20	34-45-17
LONGITUDE	85-13-33	85-16-12	85-21-42	85-10-55	85-03-36	85-00-49	85-06-40
ANTENNA	GENERIC	GENERIC	GENERIC	GENERIC	GENERIC	GENERIC	GENERIC
ERP	100 WATTS	100 WATTS	100 WATTS	100 WATTS	100 WATTS	100 WATTS	100 WATTS
CENTER OF RADIATION	1291 ' AMSL	1264 ' AMSL	1439 ' AMSL	1230 ' AMSL	1228 ' AMSL	1215 ' AMSL	1307 ' AMSL
BRUTE FORCE (BF)		INTERMODULATION (IM)					
CGW	BF 0	BF 0	BF 5	BF 0	BF 0	BF 0	BF 0
LOCALIZER	IM 8	IM 8	IM 373	IM 22	IM 20	IM 10	IM 5
			IM 8	IM 8	IM 8	IM 8	IM 8

14 BAY 1/2 WAVE 1 DEGREE BEAM TILT

SITE	VAC SITE	APP SITE	SITE #1	SITE #2	SITE #3	SITE #4	SITE #5
LATITUDE	34-42-31	34-41-38	34-47-00	34-47-49	34-50-18	34-48-20	34-45-17
LONGITUDE	85-13-33	85-16-12	85-21-42	85-10-55	85-03-36	85-00-49	85-06-40
ANTENNA	14 1/2 -1	14 1/2 -1	14 1/2 -1	14 1/2 -1	14 1/2 -1	14 1/2 -1	14 1/2 -1
ERP	6 KW	6 KW	6 KW	6 KW	6 KW	6 KW	6 KW
CENTER OF RADIATION	1291 ' AMSL	1264 ' AMSL	1439 ' AMSL	1230 ' AMSL	1228 ' AMSL	1215 ' AMSL	1307 ' AMSL
BRUTE FORCE (BF)		INTERMODULATION (IM)					
CGW	BF 0	BF 0	BF 221	BF 0	BF 0	BF 0	BF 0
LOCALIZER	IM 2114	IM 2066	IM 2433	IM 2525	IM 2070	IM 1755	IM 2090
	IM 3	IM 1	IM 76	IM 26	IM 4	IM 136	IM 3
	IM 160	IM 154	IM 233	IM 209	IM 166		IM 158

14 BAY 1/2 WAVE 1 DEGREE BEAM TILT
REDUCED ERP

SITE	VAC SITE	APP SITE	SITE #1	SITE #2	SITE #3	SITE #4	SITE #5
LATITUDE	34-42-31	34-41-38	34-47-00	34-47-49	34-50-18	34-48-20	34-45-17
LONGITUDE	85-13-33	85-16-12	85-21-42	85-10-55	85-03-36	85-00-49	85-06-40
ANTENNA	14 1/2 -1	14 1/2 -1	14 1/2 -1	14 1/2 -1	14 1/2 -1	14 1/2 -1	14 1/2 -1
ERP	100 WATTS	100 WATTS	100 WATTS	100 WATTS	100 WATTS	100 WATTS	100 WATTS
CENTER OF RADIATION	1291 ' AMSL	1264 ' AMSL	1439 ' AMSL	1230 ' AMSL	1228 ' AMSL	1215 ' AMSL	1307 ' AMSL
BRUTE FORCE (BF)		INTERMODULATION (IM)					
CGW	BF 0	BF 0	BF 0	BF 0	BF 0	BF 0	BF 0
LOCALIZER	IM 8	IM 8	IM 320	IM 20	IM 20	IM 9	IM 3
			IM 8	IM 8	IM 8	IM 8	IM 8

Exhibit 2

JOHN J. MULLANEY
JOHN H. MULLANEY, P.E. (1994)

ALAN E. GEARING, P.E.
THOMAS J. JOHNSON

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MULLANEY ENGINEERING, INC.

9049 SHADY GROVE COURT
GAITHERSBURG, MD 20877

ENGINEERING EXHIBIT EE-RM-REPLY:

TENNESSEE INSTRUCTIONAL RADIO
LA FAYETTE, GEORGIA
RM TO DELETE FM CHANNEL 298A - FAA EMI
MM DOCKET 97-196

NOVEMBER 12, 1997

ENGINEERING STATEMENT IN SUPPORT OF
A REPLY TO ITS REQUEST TO DELETE
FM CHANNEL 298A FROM LA FAYETTE, GA
BECAUSE OF FAA EMI OBJECTIONS

DECLARATION

I, John J. Mullaney, declare and state that I am a graduate electrical engineer with a B.E.E. and my qualifications are known to the Federal Communications Commission, and that I am an engineer in the firm of Mullaney Engineering, Inc., and that firm has been retained by Tennessee Instructional Radio to support a reply to comments opposing a pending petition to delete FM Channel 298A from La Fayette, GA, based upon Electro-Magnetic Interference (EMI) objections by the FAA. This exhibit simply presents the results of the FAA's Airspace Analysis Model (without a critical analysis of the model) and documents the fact the FAA has consistently refused for the past five years to approve construction of the proposed frequency and without FAA approval the FCC has similarly refused to grant the application for construction permit.

All facts contained herein are true of my own knowledge except where stated to be on information or belief, and as to those facts, I believe them to be true. I declare under penalty of perjury that the foregoing is true and correct.

John J. Mullaney

Executed on the 12th day of November 1997.

ENGINEERING EXHIBIT EE-RM-REPLY:

TENNESSEE INSTRUCTIONAL RADIO
LA FAYETTE, GEORGIA
RM TO DELETE FM CHANNEL 298A - FAA EMI
MM DOCKET 97-196

NARRATIVE STATEMENT:

I. GENERAL:

This engineering statement has been prepared on behalf of Tennessee Instructional Radio ("TIR"). The purpose of this statement is to support reply comments in MM Docket 97-196 in favor of its petition to delete FM Channel 298A (107.5 mHz) from La Fayette, GA, based upon Electro-Magnetic Interference (EMI) objections by the Federal Aviation Administration (FAA). This exhibit is filed in response to comments filed by Great South Broadcasting, Inc. ("Great South") opposing the deletion.

II. ENGINEERING DISCUSSION:

A. Background on Pending Application:

Since March 1992, when applications for this FM facility were first filed with the FCC, the FAA has consistently refused to issue a Determination of No Hazard and without this approval the FCC has similarly refused to grant the application for construction permit. TIR believes that the inability of the pending La Fayette applicant over the past five years to obtain FAA approval because of EMI

concerns clearly makes this allotment technically defective and, therefore, it should be deleted from the FM Table of Allotments.

It serves no purpose for the FCC to continue to afford protection to technically defective allotments that will never receive a construction permit from the FCC. Such continued protection of allotments thereby prevents other parties from submitting viable proposals to utilize that same or adjacent spectrum.

B. Comments by Great South:

Great South does not dispute the facts associated with this case.

> An FM application which proposes to operate with an ERP of 2.75 kW has been pending before the FCC for over five years. The FCC Staff has refused to grant a construction permit for that application because of the FAA's refusal to issue a determination of no hazard due to the FAA's conclusion that the proposed FM facility will cause harmful EMI to FAA facilities.

However, Great South submits that there are several methods which could be employed in an attempt to meet FAA concerns that Great South asserts have apparently not been explored by TIR. Those methods are:

> Use of a special antenna system which employs a half-wave spaced antenna.
>
> Use of a special antenna system which employs a directional antenna pattern.
>
> Substitution of a different aeronautical frequency for use by the FAA at the affected facilities.